

Appl. Serial No. 10/697,154
Amendment dated 9/22/05
Reply to Office action of 06/22/2005

Amendments to the Drawings

The attached 6 sheets of drawings includes changes to Figs. 29, 33, 34, and 35. These sheets replace the original sheets including Figs. 1-39. In Fig. 29, reference numeral "2d" has been changed to -- 2c --, and in Fig. 33, previously omitted reference numeral -- 76 -- has been added. In Fig. 34, the lead line for reference numeral 66 has been added, and in Fig. 35, reference numeral "104" has been changed to -- 104a --, and reference numeral -- 104 -- has been added.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes

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REMARKS/ARGUMENTS

Applicant has amended the specification and drawings as requested by the Examiner, and has made certain changes of form to more particularly describe and illustrate the invention. Great care has been exercised to avoid the introduction of any new matter into the application.

Claims 1, 3-5, and 7-12, as amended, now stand in the application. Parent claim 1 has been amended to more particularly and definitely define the invention as so helpfully suggested by the Examiner, and to include the subject matter of cancelled claim 2. Claims 3 and 4 depend from claim 1. Claim 5 has been rewritten in independent form to include the subject matter of allowable claim 6, and hence this claim is believed to be allowable, together with claims 7 - 12 that are dependent thereon. These allowable claims are directed to the watertight structure of the slam latch and strike assembly.

Allowance of Claims 1, 3 and 4, as amended, is courteously requested for the following reasons:

According to Applicant's invention recited in these claims, in order to achieve a strike and latch assembly that will compensate for slight misalignment of the latch and strike members, all of the one-way latch teeth and the one-way strike teeth have tips (46, 66, 166) are curved, convex and contained in vertically-spaced horizontal planes. In the embodiment of Figs. 1-34, the strike member 4 is cylindrical and the curved strike teeth 46 have a circular configuration. In the embodiment of Figs. 35-39, the strike member 104 has a polygonal configuration, and the curved strike teeth 166 have an arcuate configuration. In both embodiments, the curved latch teeth 66 have and arcuate configuration.

Applicant courteously contends that the present invention as recited in amended claims 1, 3 and 4 is clearly distinguishable from the teachings of the cited references.

In the Furlong patent No. 6,709,030, a water-resistant slam-latch is disclosed in which the base portion of the pivotally movable pull lever 16 is connected with the slidable latch member 30 by an axle and cam arrangement 32, 34 and 36 that is arranged outside the body, as shown in Figs. 6, 8 and 9. Thus, the latch is particularly suitable "for use on boats or the like, presenting a substantially water impervious exterior." [Abstract] No disclosure is presented by Furlong of the use of latch and strike teeth having curved convex tip portions contained in vertically spaced horizontal planes, thereby to compensate for minor misalignment of the strike and latch components.

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Similarly, the Johansson et al patent No. 6,113,160 is directed to a latching arrangement in which the pawl 16 having a serrated face 82 (Figs. 2, 9, and 10) can be displaced downwardly from the latched position of Fig. 1 to the unlatched position of Fig. 14 by rotation of the knob 18 only when the knob is in the extended position of Fig. 11 and 14. This is a result of the provision of the catch means defined by the resilient leg 48 on the sleeve 20. "As best shown in Fig. 2, the pawl 16 also includes at least one and preferably a plurality of ratcheting teeth or serrations at spaced separation and substantially parallel with one another proximate its terminating end at its outer surface 82. In this embodiment each of the plurality of serrations comprises a substantially ramped camming surface and a locking surface substantially perpendicular to a longitudinal axis of the pawl 16." (Column 7, lines 59-67) "As shown in Fig. 1, the keeper 12 is generally rectangular in this embodiment and includes an engaging surface 13 defined by at least one and preferably a plurality of ratcheting teeth or serrations, each comprised of a substantially ramped camming surface and a locking surface." (Column 10, lines 17 - 22) "In addition, another advantage of the serrations on the pawl and keeper is to accommodate for misalignment. In addition, the rounded profile of the pawl and keeper also accommodate for misalignment by allowing rotational misalignment about the longitudinal axis of the latch." (Column 28, lines 29 - 34) As distinguished from Applicant's invention wherein the tips of each of the cooperating latch teeth and strike teeth are curved and convex, in Fig. 1 of Johansson et al, the teeth or serrations 13 of the keeper 12 are concave. Thus, as a result of the cooperation between two curved convex surfaces, Applicant achieves an improved correction for misalignment between the strike and the latch members. Furthermore, Johansson et al present no teaching whatsoever of applicant's novel cylindrical strike configuration of Figs. 1, 2 and 11, and defined in amended Claim 2.

The Varney patent No. 462, 183 broadly discloses a window sash lock including rack and pinion operating means, but no disclosure is presented in this reference of the novel strike and latch means having ratcheting teeth with curved convex tip configurations as recited in the claims.

Similarly, neither the Sandhu et al patent No. 5,484,178 nor any of the remaining patents disclose Applicant's claimed invention.

Favorable action is courteously solicited.

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Respectfully submitted,

9/22

2005

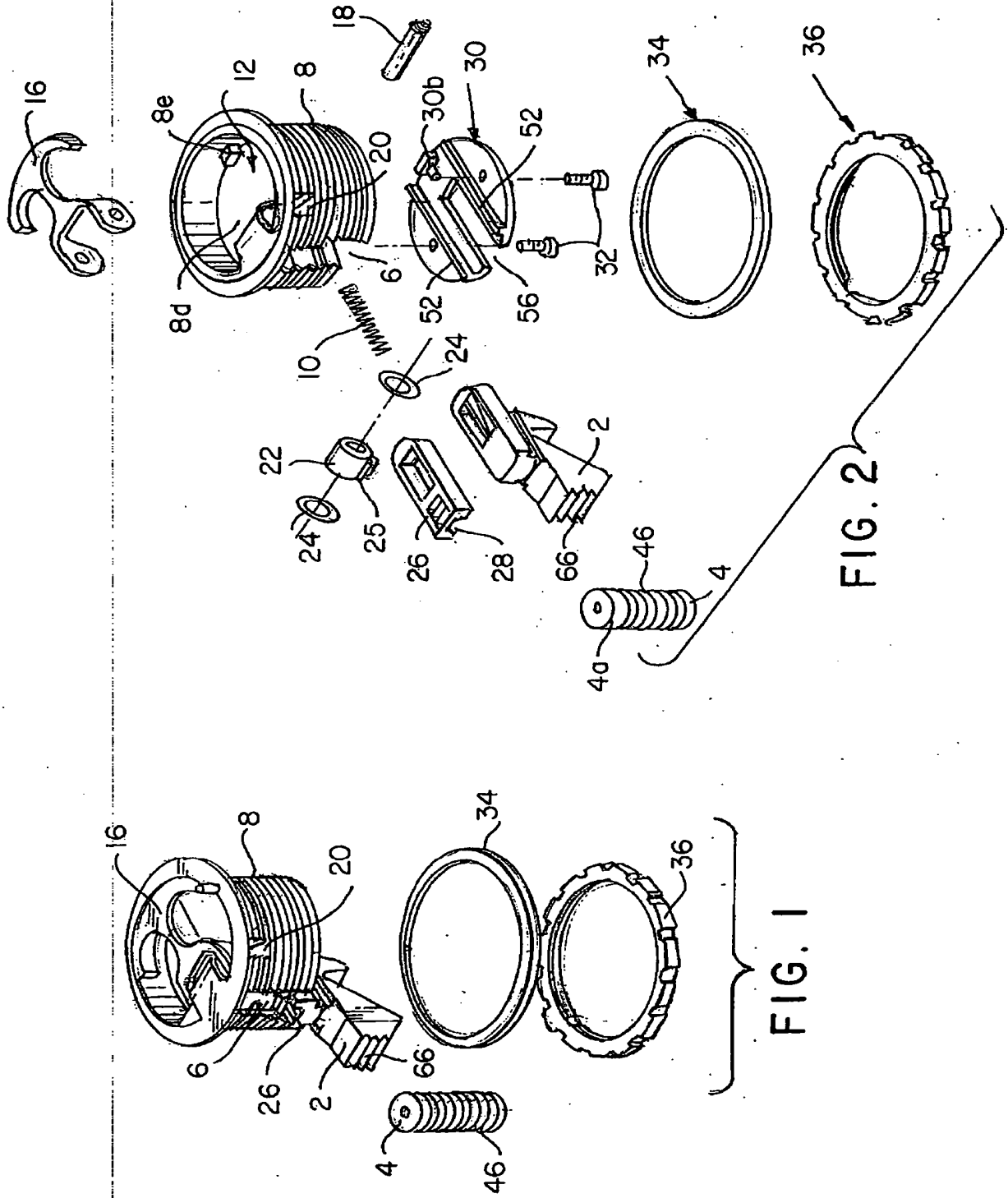


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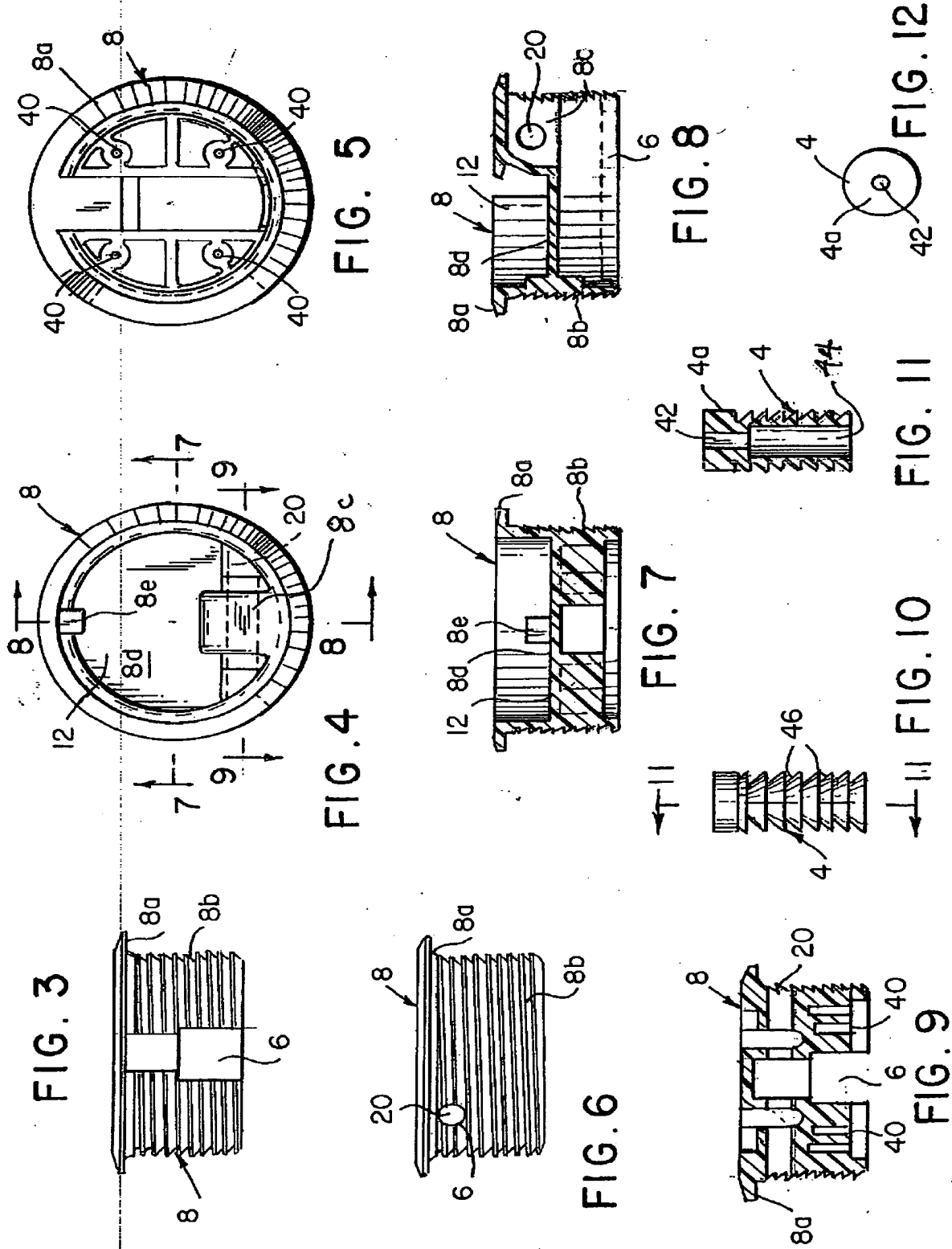
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Annotated Sheet Showing Changes (2 of 6)



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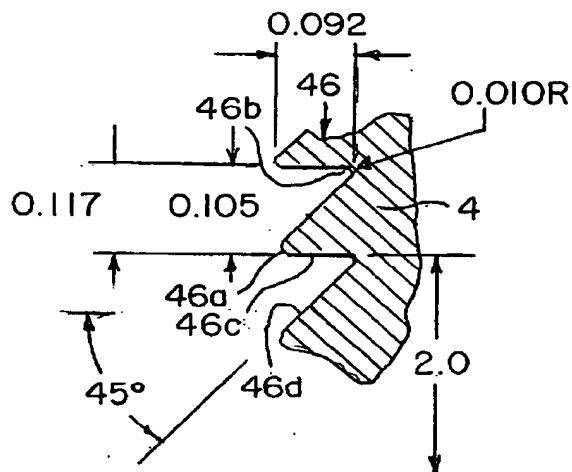


FIG. 11a

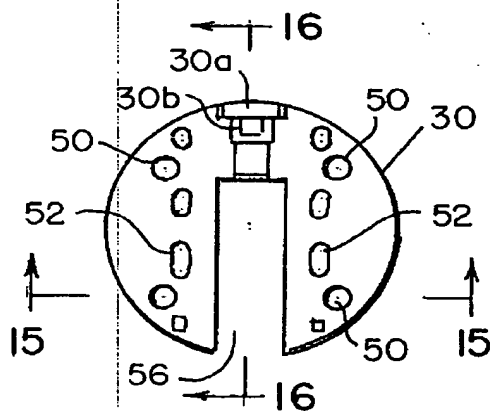


FIG. 13

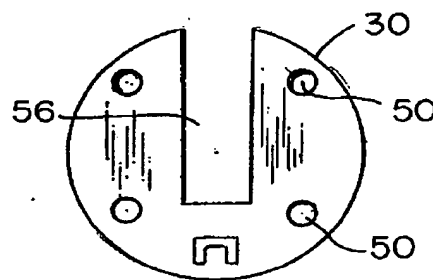


FIG. 14



FIG. 15

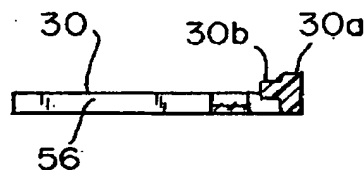


FIG. 16

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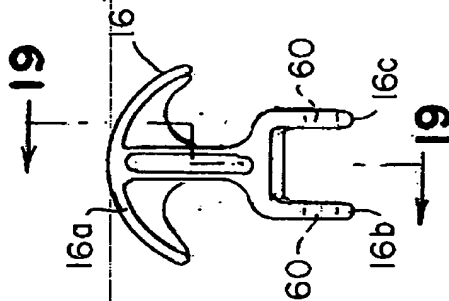


FIG. 17

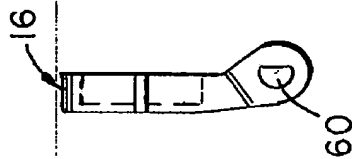


FIG. 18

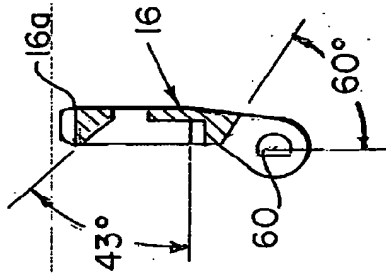


FIG. 19

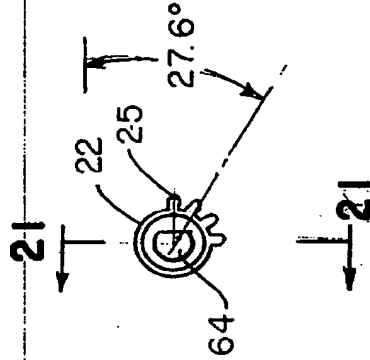


FIG. 20

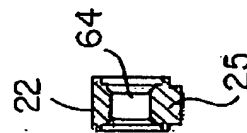


FIG. 21

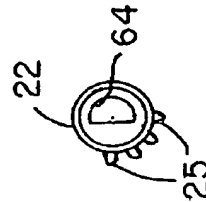


FIG. 22



FIG. 23



FIG. 24

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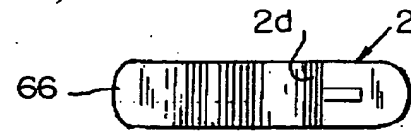


FIG. 26

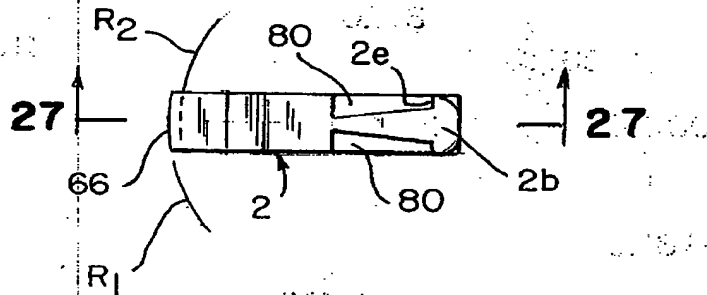


FIG. 25

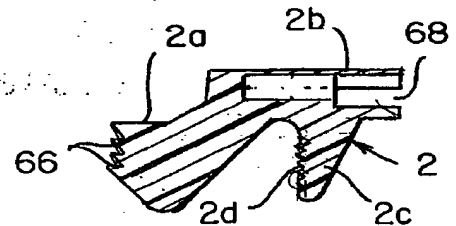


FIG. 27

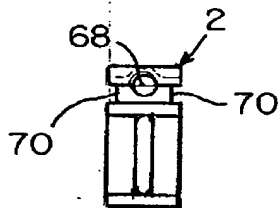


FIG. 28

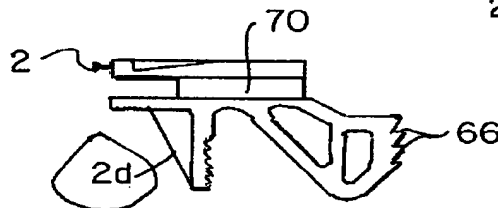


FIG. 29

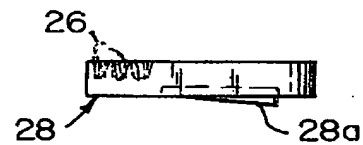


FIG. 30

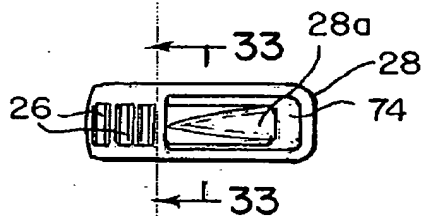


FIG. 31

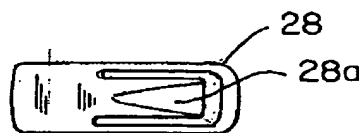


FIG. 32

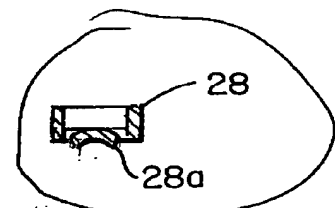


FIG. 33

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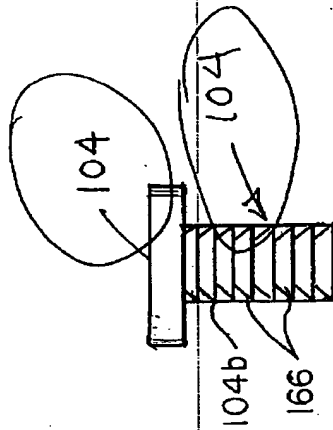


FIG. 35

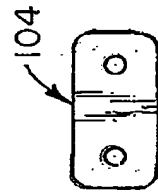


FIG. 36

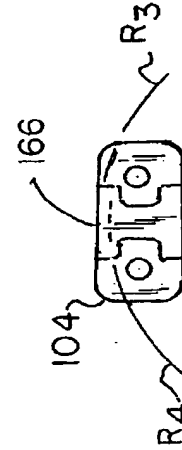


FIG. 37

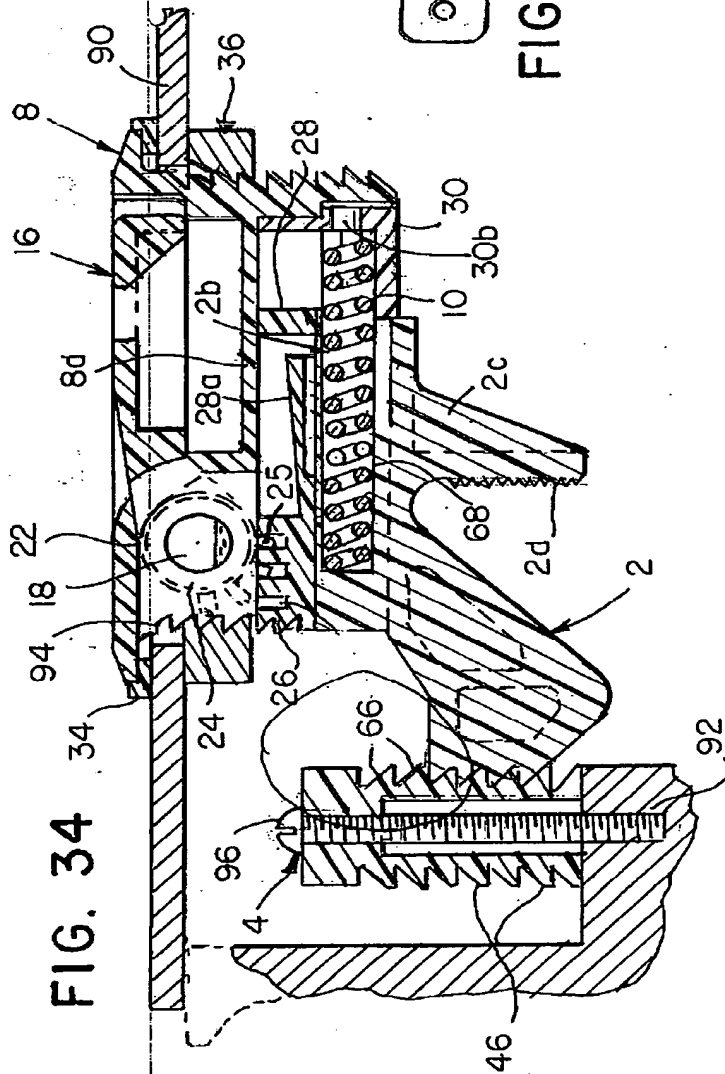


FIG. 34

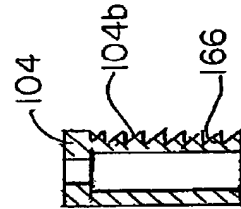


FIG. 39

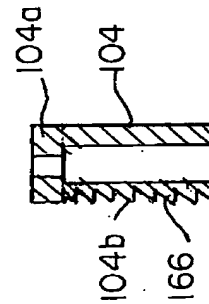


FIG. 38

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